

AMENDMENT TO THE SPECIFICATION

Please replace the paragraph beginning at page 17, line 5, with the following rewritten paragraph:

Fusion proteins comprising FGF-20 or a biologically active or antigenic fragment thereof can be produced using methods known in the art. Such fusion proteins can be used therapeutically or can be produced in order to simplify the isolation and purification procedures. Histidine residues can be incorporated to allow immobilized metal affinity chromatography purification. Residues EQKLISEEDL (SEQ ID NO:7) contain the antigenic determinant recognized by the myc monoclonal antibody and can be incorporated to allow myc monoclonal antibody-based affinity purification. A thrombin cleavage site can be incorporated to allow cleavage of the molecule at a chosen site; a preferred thrombin cleavage site consists of residues LVPRG. Purification of the molecule can be facilitated by incorporating a sequence, such as residues SAWRHPQFGG (SEQ ID NO:9), which binds to paramagnetic streptavidin beads. Such embodiments are described in WO 97/25345, which is incorporated by reference.

Please replace the paragraph beginning at page 41, line 21, with the following rewritten paragraph:

Isolation and Analysis of Rat FGF-20 cDNA --- DNA was amplified from rat genomic DNA by polymerase chain reaction (PCR) for 30 cycles in 25 µl of a reaction mixture containing 5 pmole/µl of each of the sense and antisense degenerate primers representing all possible codons corresponding to the consensus amino acid sequences of rat FGF-9 (17) and FGF-16 (21), FEENWY (SEQ ID NO:10) and THFLPR (SEQ ID NO:11), respectively. The amplified product was further amplified by PCR with each of the sense and antisense degenerate primers representing all possible codons corresponding to another consensus amino acid sequences of rat FGF-9 (17) and FGF-16 (21), ENWYNT (SEQ ID NO:12) and HQKFTH (SEQ ID NO:13), respectively. The amplified DNA of expected size (approximately 150 base pairs) was cloned into the pGEM-T DNA vector (Promega, Madison, Wisconsin). The nucleotide sequence of the cloned DNA was determined by a DNA sequencer (Applied Biosystems, Foster, California). To determine the coding region of a novel FGF cDNA, the coding region was amplified from cDNA synthesized from rat brain poly (A)⁺ RNA by adaptor-ligation mediated

polymerase chain reaction using a Marathon cDNA amplification kit (Clontech, Palo Alto, California). To determine the amino-terminal region, DNA encoding the region was amplified from rat genomic DNA by cassette-ligation mediated polymerase chain reaction (Isegawa, Y. et al., *Mol. Cell. Probes* 6:467-475 (1992)) using a LA PCR *in vitro* cloning kit (TaKaRa, Kyoto, Japan). The cDNA encoding the entire coding region of the FGF was amplified from rat brain cDNA by polymerase chain reaction in the presence of 5% dimethyl sulfoxide (Villarreal, X.C. et al., *Anal. Biochem.* 197:362-367 (1991)) using the FGF-specific primers including the 5' and 3' noncoding sequences, and cloned into the pGEM-T DNA vector. The apparent evolutionary relationships of members of the FGF family were examined by the unweighted pair-group method with arithmetic mean method using the sequence analysis software, Genetyx (Software Development Co., Tokyo, Japan).

Please replace the paragraph beginning at page 44, line 2, with the following rewritten paragraph:

Preparation of Recombinant Rat FGF-20 --- The rat FGF-20 cDNA with a DNA fragment (75 BP) encoding an E-tag (GAPVPYPDPLEPR) (SEQ ID NO:14) and a His₆ tag (HHHHHH) (SEQ ID NO:15) at the 3'-terminus of the coding region was constructed in a transfer vector DNA, *pBacPAK9* (Clontech, Palo Alto, California). Recombinant baculovirus containing the FGF-20 cDNA with the tag sequences was obtained by cotransfection of Sf9 cells with the recombinant *pBacPAK9* and a Bsu36 I-digested expression vector, *BacPAK6* (Clontech, Palo Alto, California). High Five insect cells were infected with the resultant recombinant baculovirus and incubated at 27°C for 65 h in serum-free medium EX-CELL 400 (JRH Biosciences, Lenexa, Kansas). The culture medium was dialyzed against phosphate-buffered saline (PBS), and applied to a column of Ni-NTA agarose (QIAGEN GmbH, Hilden, Germany) in PBS containing 20 mM imidazole and 0.5 M NaCl. After washing the column with PBS containing 20 mM imidazole and 0.5 M NaCl, recombinant FGF-20 was eluted from the column with PBS containing 250 mM imidazole and 0.5 M NaCl, and applied to a column of Bio-Gel P-6 DG (Bio-Rad Lab., Hercules, California) in PBS containing 100 µg/mlBSA.